

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1. – 17. (Canceled)

18. (Currently Amended) A method of detecting the presence of a pathogen or disease in a sample comprising:

- a) contacting a polypeptide ~~of claim 1~~ with said sample, wherein said polypeptide comprises an engineered PDZ domain having at least 50% homology with SEQ ID NO: 2, wherein said engineered PDZ domain binds to a target associated with said pathogen or disease state in said sample; and
- b) detecting binding of said polypeptide to said sample.

19. – 23. (Canceled)

24. (New) The method of claim 18 wherein said pathogen is *Bacillus anthracis* or *Clostridium botulinum*.

25. (New) The method of claim 18 wherein said target is protein BclA of *Bacillus anthracis* or a fragment thereof.

26. (New) The method of claim 18 wherein said target is a polypeptide having a C-terminal sequence of EFYA.

27. (New) The method of claim 18 wherein said PDZ domain is evolved.

28. (New) The method of claim 18 wherein said polypeptide binds to said target with a dissociation constant ( $K_d$ ) of about 100 nM or lower.

29. (New) The method of claim 18 wherein said polypeptide binds to said target with a dissociation constant of about 15 nM or lower.

30. (New) The method of claim 18 wherein said polypeptide further comprises a reporter group.